in which

$R^4$ is a halogen atom or a pseudohalogen,

$R^{10}$ is a hydrogen atom or a straight-chain or branched $C_1$-$C_4$ alkyl group,

$R^{20}$ and $R^{20a}$ are, independently of one another, a hydrogen atom, a straight-chain or branched $C_{1-4}$ alkyl or hydroxy-$C_{1-4}$ alkyl group, or

one of radicals $R^{20}$ and $R^{20a}$ is a hydrogen atom, a straight-chain or branched $C_{1-4}$ alkyl or hydroxy-$C_{1-4}$ alkyl group, and the other radical is a halogen atom or a pseudohalogen.

2. (Amended) A17-Methylene steroid according to claim 1, wherein $R^4$ is a chlorine or bromine atom or a cyano group.

3. (Twice Amended) A17-Methylene steroid according to claim 1, wherein one of radicals $R^{20}$ and $R^{20a}$ is a hydrogen atom or a methyl group, and the other radical is a fluorine, chlorine or bromine atom, an azido, cyano or rhodano group or hydroxymethyl.

4. (Twice Amended) A17-Methylene steroid according to claim 1, wherein $R^{10}$ is a hydrogen atom or a methyl group.

5. (Amended) A17-Methylene steroid according to claim 1, selected from the group consisting of

1) E-17-Chloromethylene-4-chloro-estr-4-en-3-one,

2) E-17-Cyanomethylene-4-chloro-estr-4-en-3-one,

3) Z-17-Cyanomethylene-4-chloro-estr-4-en-3-one,

4) Z-17-(1')-Cyanoethylidene-4-chloro-estr-4-en-3-one,

5) Z-17-Ethylidene-4-chloro-estr-4-en-3-one,

6) E-17-Ethylidene-4-chloro-estr-4-en-3-one,

7) E-17-Bromomethylene-4-chloro-estr-4-en-3-one,

8) Z-17-Chloroethylidene-4-chloro-estr-4-en-3-one,

9) Z-17-Bromoethylidene-4-chloro-estr-4-en-3-one,

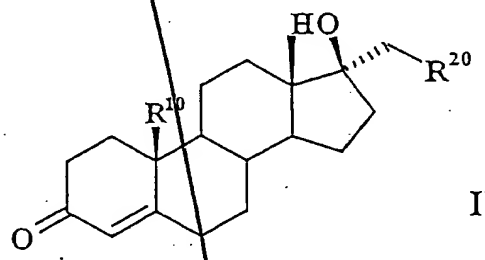
10) E-17-Chloromethylene-4-cyano-androst-4-en-3-one,

11) E-17-Chloromethylene-4-chloro-androst-4-en-3-one,

12) E-17-(2')-Hydroxyethylidene-4-chloro-estr-4-en-3-one, and

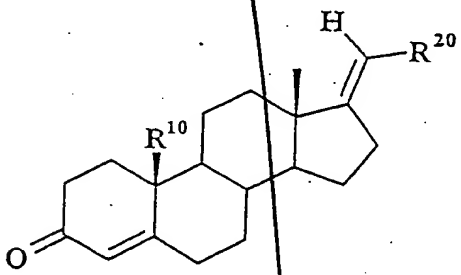
13) Z-17-(2')-Hydroxyethylidene-4-chloro-estr-4-en-3-one.

6. (Amended) A process for preparing a 17-methylene steroid according to claim 1, wherein $R^{20a}$ is a hydrogen atom, comprising reacting a compound of formula II,



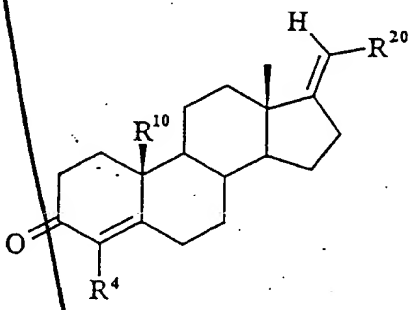

II

in an aprotic solvent with an acid chloride to form a 17-methylene steroid of formula III,




III

the 4,5-epoxide is generated with $H_2O_2$/NaOH, the 4,5-epoxide is then opened with a nucleophilic reagent, which is derived from a halogen atom or pseudohalogen, in a dipolar aprotic solvent to a halogen- or pseudohalogen hydrin, and optionally reacted with mineral acid, carboxylic acid or sulfonic acid in a protic or aprotic solvent with dehydration to a compound of formula IV,

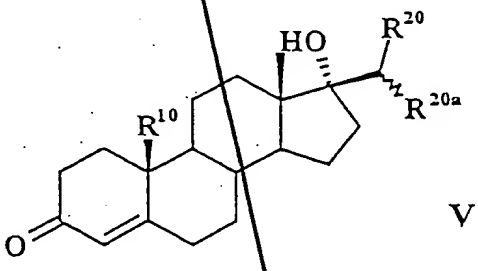


IV

wherein $R^4$ is a halogen atom or pseudohalogen, $R^{10}$ is a hydrogen atom or a straight-chain or branched $C_1$-$C_4$ alkyl group,

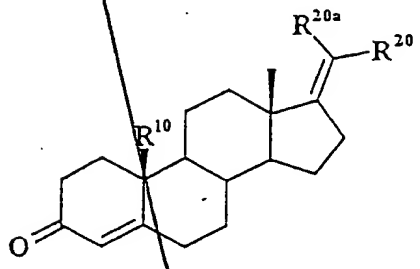
and $R^{20}$ is a $C_{1-4}$ alkyl or hydroxy-$C_{1-4}$ alkyl group, a halogen atom or a pseudohalogen.

7. (Amended) A process for preparing a 17-methylene steroid according to claim 1, comprising reacting a compound of formula V,



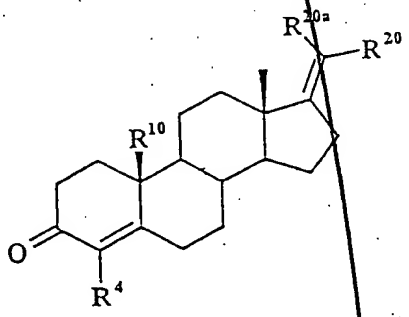
V

with an acid chloride in an aprotic solvent to form a methylene steroid of formula VI,



VI

the 4,5-epoxide is generated with $H_2O_2$/NaOH, the 4,5-epoxide is then opened with a nucleophilic reagent, which is derived from a halogen atom or pseudohalogen, in a dipolar aprotic solvent to a halogen- or pseudohalogen hydrin, and optionally reacted with mineral acid, carboxylic acid or sulfonic acid in a protic or aprotic solvent with dehydration to a compound of formula VII,



VII

in which $R^4$ is a halogen atom or pseudohalogen, $R^{10}$ is a hydrogen atom or a straight-chain or branched $C_1$-$C_4$ alkyl group,

and $R^{20}$ is a $C_{1-4}$ alkyl or hydroxy-$C_{1-4}$ alkyl group, and $R^{20a}$ is a hydrogen atom, a halogen atom or a pseudohalogen.

8. (Twice Amended) A pharmaceutical composition comprising at least one 17-methylene steroid according to claim 1 and a pharmaceutically compatible adjuvant or vehicle.

Please cancel claim 9 without prejudice or disclaimer.

10. (Twice Amended) A method of treating a prostate diseases, alopecia of the male type, acne or hirsutism, comprising administering to a patient in need thereof an effective amount of a compound according to claim 1.

Please enter the following new claims

11. A method of effecting contraception in a man or in a woman comprising administering to a patient in need thereof an effective amount of a compound according to claim 1.

12. A method inhibiting 5α-reductase comprising administering to a patient in need thereof an effective amount of a compound according to claim 1.